

REMARKS

Claims 1-16, 18-29, 31-32, 34 and 36 are pending in the present application. In the above amendments, claims 1, 9, 14, 16, 27, 29, 32 and 34 have been amended.

Applicant respectfully responds to this Office Action.

Claim Rejections – 35 USC § 103(a)

Claims 1-15, 19-20, 23-29, 31-32, 34 and 36 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,243,468 to Pearce et al., in view of U.S. Patent No. 6,931,545 to Ta et al., and further in view of Gralla, in How the Internet Works. Claims 16, 18 and 21-22 have been rejected under 35 U.S.C. §103(a) as being unpatentable over the Pearce patent, in view of Ta patent.

The rejection of claim 1 as allegedly unpatentable over the Pearce patent in view of the Ta patent, and further in view of the Gralla publication, is respectfully traversed. Claim 1, as amended, recites “authenticating a certificate, from a code image, with a first public key stored in the hardware, the code image including the software”. The Pearce patent, the Ta patent, and the Gralla publication fail to disclose a code image including a certificate and including the software being validated for the hardware. In the Office Action, the Examiner suggests, “Applicants’ specification defines a code image as software, certificate, and signature. Since Pearce in view of Ta, in further view of Gralla discloses these three elements, there is a code image when combining the references, even if a code image, as defined by applicant, is not found in any single reference.” See, Office Action, page 4. Applicants assert that just because elements exist does not means that the combination of elements would have been obvious to one skilled in the art at the time of the invention.

Claim 1 further recites, “obtaining a signature, from the certificate, generated for the software, a first identifier for the software, and a second identifier for the hardware, wherein the signature is generated using cryptography and is used to validate an association of the software with the hardware”. The Pearce patent, the Ta patent, and the Gralla publication fail to disclose obtaining a signature, from the certificate, generated for the software, a first identifier for the software, and a second identifier for the hardware. As indicated above, the Examiner claims the existence of a signature, and it alleged connection with the code image. However, the Examiner

fails to suggest that the signature is obtained from the certificate. Also, the Examiner fails to suggest that the signature is generated for the software, a first identifier for the software, and a second identifier for the hardware.

Claim 1 also recites “validating the signature with a second public key from the certificate.” Again, the Pearce patent, the Ta patent, and the Gralla publication fail to disclose validating the signature with a second public key from the certificate. Further, the Examiner fails to suggest any connection between a second public key and the certificate of the code image, or any connection with validating the signature.

Regarding reasons for combining the cited references, the Examiner concludes, “it would have been obvious for one of ordinary skill in the art to secure Pearce’s network communication with digital certificates and public key cryptography for Gralla’s given motivation of protecting information and increasing security.” See, Office Action, page 3. Applicants find these reasons somewhat unrelated to the language of the claim 1. Further, in analyzing the issue of obviousness, it is necessary to guard against slipping into the use of hindsight, and to resist the temptation to read into the prior art the teachings of the invention at issue. See, Graham v. John Deere Co., 383 U.S. 1, 36 (1966). Applicants assert that the Examiner has used hindsight analysis in analyzing claim 1. Applicants assert that the Examiner searched for each feature, and kept combining prior art references until a sufficient number of elements were aggregated to identify the limitations recited in claim 1. Further, the Examiner’s reasons for combining the references are merely a conclusionary statement of obviousness.

Accordingly, the rejection of claim 1 as allegedly unpatentable over the Pearce patent in view of the Ta patent, and further in view of the Gralla publication, should be withdrawn.

The amendments to claim 1 are supported by the specification at page 13, paragraph [1061], and by claim 9.

It is respectfully submitted that dependent claims 2-8 are at least allowable for the reasons given above in relation to independent claim 1.

Claims 9 and 14 are apparatus claims defined by language similar to that of claim 1. For reasons similar to those discussed above with respect to claim 1, the rejections of claims 9 and 14, as allegedly unpatentable over the Pearce patent in view of the Ta patent, and further in view of the Gralla publication, should be withdrawn.

It is respectfully submitted that dependent claims 10-13 and 15 are at least allowable for the reasons given above in relation to independent claims 1, 9 and 14.

The rejection of claim 16 as allegedly unpatentable over the Pearce patent in view of the Ta patent, is respectfully traversed. Claim 16, as amended, recites “obtaining a first identifier for the software, wherein the first identifier identifies a software release, and all instances of the software release have the same first identifier; [and] obtaining a second identifier for the hardware, wherein the second identifier identifies a hardware platform, and all instances of the hardware platform have the same second identifier”. The Pearce patent and the Ta patent fail to disclose a first identifier that identifies a software release, and all instances of the software release have the same first identifier, and further fails to disclose a second identifier that identifies a hardware platform, and all instances of the hardware platform have the same second identifier. Instead, the Pearce patent discloses a software product ID 102 that “consists of a 5-bit RPC (registered product code) value for the software product, a 3-bit site value indicating a place of manufacture, and a 7-bit serialized number that is incremented with each product.” See, column 5, lines 52-56 (emphasis added). The Ta patent fails to remedy the disclosure deficiency of the Pearce patent.

Regarding reasons for combining the cited patents, the Examiner concludes, “it would have been obvious for one of ordinary skill in the art to use the hash of Ta as the checksum in Pearce to increase security.” See, Office Action, page 2. The Examiner provides no other discussion about increased security. Further, Applicants note that claim 16 has no mention of security. The specification focuses more on the whether the software is “suitable” for the hardware. See, page 1, paragraph [1004]. In analyzing the issue of obviousness, it is necessary to guard against slipping into the use of hindsight, and to resist the temptation to read into the prior art the teachings of the invention at issue. See, Graham v. John Deere Co., 383 U.S. 1, 36 (1966). Applicants assert that the Examiner has used hindsight analysis in analyzing claim 16. Further, the Examiner’s reason for combining the reason is merely a conclusionary statement of obviousness.

Accordingly, the rejection of claim 16 as allegedly unpatentable over the Pearce patent in view of the Ta patent, should be withdrawn.

The amendments to claim 16 are supported by the specification at page 4, paragraph [1024].

It is respectfully submitted that dependent claims 18-22 are at least allowable for the reasons given above in relation to independent claim 16.

Claims 27, 29, 32 and 34 are apparatus and method claims defined by language similar to that of claim 16. For reasons similar to those discussed above with respect to claim 16, the rejections of claims 27, 29, 32 and 34, as allegedly unpatentable over the Pearce patent in view of the Ta patent, should be withdrawn.

It is respectfully submitted that dependent claims 28 and 31 are at least allowable for the reasons given above in relation to independent claims 16, 27 and 29.

The rejection of claim 23 as allegedly unpatentable over the Pearce patent in view of the Ta patent, and further in view of the Gralla publication, is respectfully traversed. Claim 23 recites “an apparatus operable to associate software with hardware, comprising: a communication unit operative to obtain, from a code generator entity, information for a software code, a first identifier for the software, and a second identifier for the hardware; and a controller operative to generate a signature for the software, the first identifier, and the second identifier using cryptography and a first secure cryptographic key, wherein the signature is used to validate an association of the software with the hardware, the controller further configured to generate a certificate using a second secure cryptographic key, the certificate used to authenticate a certificate authority.”. In the Office Action, Applicants are unable to locate any discussion of the communication unit, code generator entity, or controller recited in claims 23. “The examiner bears the initial burden of factually supporting any prima facie conclusion of obviousness. If the examiner does not produce a prima facie case, the applicant is under no obligation to submit evidence of nonobviousness.” See, MPEP 2142. Accordingly, until the Examiner provides a concise explanation of how the cited references apply to claim 23, Applicants continue to assert that claim 23 defines a patent advance over the Pearce patent in view of the Ta patent, and further in view of the Gralla publication, and that the rejection of claim 23 should be withdrawn.

It is respectfully submitted that dependent claims 24-26 are at least allowable for the reasons given above in relation to independent claim 23.

The rejection of claim 36 as allegedly unpatentable over the Pearce patent in view of the Ta patent, and further in view of the Gralla publication, is respectfully traversed. Claim 36 recites “an apparatus operable to validate software for hardware, comprising: a storage device configured to store a code image including the software, a code signature, and a certificate; a secure storage device configured to store a hardware identifier and a certificate authority public key; a processor configured to access the storage device and operative to: authenticate the certificate with the certificate authority public key, obtain a regenerated signature digest based on the software, a first identifier for the software, and the hardware identifier, decrypt the certificate using the certificate authority public key to recover a code public key, decrypt the code signature using the code public key to recover a received signature digest, and compare the regenerated signature digest with the received signature digest to validate the association of the software with the hardware.” In the Office Action, Applicants are unable to locate any discussion of the storage device, secure storage device, or processor and its operations. “The examiner bears the initial burden of factually supporting any prima facie conclusion of obviousness. If the examiner does not produce a prima facie case, the applicant is under no obligation to submit evidence of nonobviousness.” See, MPEP 2142. Accordingly, until the Examiner provides a concise explanation of how the cited references apply to claim 36, Applicants continue to assert that claim 36 defines a patent advance over the Pearce patent in view of the Ta patent, and further in view of the Gralla publication, and that the rejection of claim 36 should be withdrawn.

REQUEST FOR ALLOWANCE

In view of the foregoing, Applicant submits that all pending claims in the application are patentable. Accordingly, reconsideration and allowance of this application are earnestly solicited. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Respectfully submitted,

Dated: **October 4, 2007**

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